



WEST Search History

DATE: Sunday, March 23, 2003

Set Name Query
side by side

Hit Count Set Name
result set

DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

L5	(bis near5 (aminophenoxy or amino phenoxy) near5 ethane near5 (tetraacetic or tetra acetic) or bapta) and (l1 or (pulmonary or lung) near50 surfactant)	10	L5
L4	bis near5 (aminophenoxy or amino phenoxy) near5 ethane near5 (tetraacetic or tetra acetic) and l1	6	L4
L3	l1 and bapta	8	L3
L2	L1 and (pulmonary or lung) near50 surfactant	3	L2
L1	424/dig.6 or 514/532 or 514/534 or 514/567 or 514/570 or 514/576 or 514/646 or 514/716 or 514/718 or 514/721	4576	L1

END OF SEARCH HISTORY

> d his ful

(FILE 'HOME' ENTERED AT 15:57:08 ON 23 MAR 2003)

FILE 'REGISTRY' ENTERED AT 15:58:09 ON 23 MAR 2003

L1 1 SEA VERAPAMIL/CN
 D

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIODASE, ...' ENTERED AT 15:58:35 ON 23 MAR 2003

L2 440 SEA VERAPAMIL (10A) CHELAT? (10A) (CALCIUM OR CA)
 D 440 KWIC
 D 333 KWIC

L3 45 SEA CALCIUM (5A) CHELAT? AND (PULMONARY OR LUNG OR LUNGS)
 (50A) (SURFACTANT OR SURFACTANTS)

L4 32 DUP REM L3 (13 DUPLICATES REMOVED)
 D 1-32
 D 32 IALL
 D 31 IALL
 D 30 IALL
 D 28 IALL
 D 26 IALL
 D 20 KWIC
 D 19 KWIC
 D 15 IALL
 D 14 IALL

=> d his ful

(FILE 'HOME' ENTERED AT 12:48:33 ON 23 MAR 2003)

FILE 'REGISTRY' ENTERED AT 12:48:54 ON 23 MAR 2003

L1 1 SEA BAPTA-AM
D
L2 7 SEA BAPTA
D 1-7
L3 1 SEA BAPTA/CN

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIODASE, ...' ENTERED AT 12:52:27 ON 23 MAR 2003

FILE 'REGISTRY' ENTERED AT 12:52:54 ON 23 MAR 2003

SET SMARTSELECT ON
L4 SEL L1 1- CHEM : 2 TERMS
SET SMARTSELECT OFF

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIODASE, ...' ENTERED AT 12:52:57 ON 23 MAR 2003

L5 7023 SEA L4/BI
FILE 'REGISTRY' ENTERED AT 12:54:06 ON 23 MAR 2003
SET SMARTSELECT ON
L6 SEL L3 1- CHEM : 4 TERMS
SET SMARTSELECT OFF

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIODASE, ...' ENTERED AT 12:54:07 ON 23 MAR 2003

L7 20101 SEA L6/BI
L8 20103 SEA L1 OR L3 OR L5 OR L7
L9 40 SEA L8 AND (PULMONARY SURFACTANT OR PULMONARY SURFACTANTS OR LUNG SURFACTANT OR LUNG SURFACTANTS)
L10 45 SEA L8 AND (PULMONARY (5A) SURFACTANT OR PULMONARY (5A) SURFACTANTS OR (LUNG OR LUNGS) (5A) (SURFACTANT OR SURFACTANTS))
L11 50 SEA L8 AND (PULMONARY (50A) SURFACTANT OR PULMONARY (50A) SURFACTANTS OR (LUNG OR LUNGS) (50A) (SURFACTANT OR SURFACTANTS))
L12 20 DUP REM L11 (30 DUPLICATES REMOVED)
D 1-20
D 20 IALL
D 19 IALL
D 18 IALL
D 17 IALL
D 16 IALL
D 15 IALL
D 14 IALL

FILE 'STNGUIDE' ENTERED AT 13:19:24 ON 23 MAR 2003

FILE 'EMBASE, BIOSIS, CANCERLIT, CAPLUS, ESBIODASE, IFIPAT, JICST-EPLUS, MEDLINE, PASCAL' ENTERED AT 13:25:56 ON 23 MAR 2003
D 13 IALL

FILE 'STNGUIDE' ENTERED AT 13:25:56 ON 23 MAR 2003

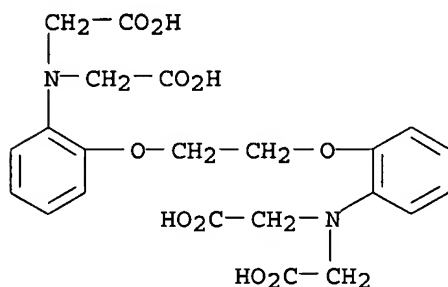
FILE 'EMBASE, BIOSIS, CANCERLIT, CAPLUS, ESBIODASE, IFIPAT, JICST-EPLUS,
MEDLINE, PASCAL' ENTERED AT 13:26:48 ON 23 MAR 2003
D 12 IALL

FILE 'STNGUIDE' ENTERED AT 13:26:49 ON 23 MAR 2003

FILE 'EMBASE, BIOSIS, CANCERLIT, CAPLUS, ESBIODASE, IFIPAT, JICST-EPLUS,
MEDLINE, PASCAL' ENTERED AT 13:27:18 ON 23 MAR 2003
D 11 IALL

FILE 'STNGUIDE' ENTERED AT 13:27:19 ON 23 MAR 2003

L2 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2003 ACS
 RN 85233-19-8 REGISTRY
 CN Glycine, N,N'-[1,2-ethanediylbis(oxy-2,1-phenylene)]bis[N-(carboxymethyl)-
 (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 1,2-Bis(2-aminophenoxy)ethane-N,N,N',N'-tetraacetic acid
 CN 1,2-Bis(o-aminophenoxy)ethane-N,N,N',N'-tetraacetic acid
 CN BAPTA
 FS 3D CONCORD
 MF C22 H24 N2 O10
 CI COM
 LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT,
 CAPLUS, CASREACT, CEN, CHEMCATS, CSCHM, DDFU, DRUGU, MEDLINE, MRCK*,
 MSDS-OHS, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

156 REFERENCES IN FILE CA (1962 TO DATE)
 28 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 156 REFERENCES IN FILE CAPLUS (1962 TO DATE)

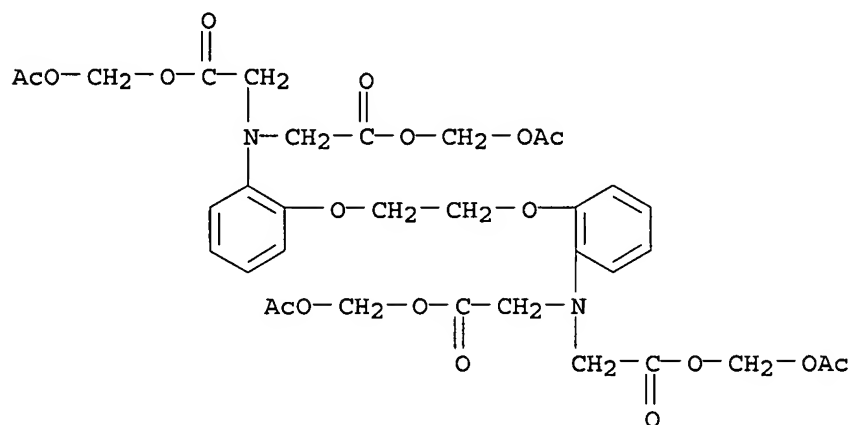
=> d his

(FILE 'HOME' ENTERED AT 12:48:33 ON 23 MAR 2003)

FILE 'REGISTRY' ENTERED AT 12:48:54 ON 23 MAR 2003

L1 1 S BAPTA-AM
 L2 7 S BAPTA

L2 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2003 ACS
 RN 126150-97-8 REGISTRY
 CN Glycine, N,N'-[1,2-ethanediylbis(oxy-2,1-phenylene)]bis[N-2-
 [(acetyloxy)methoxy]-2-oxoethyl]-, bis[(acetyloxy)methyl] ester (9CI) (CA
 INDEX NAME)
 OTHER NAMES:
 CN **BAPTA-AM**
 FS 3D CONCORD
 MF C34 H40 N2 O18
 SR CA
 LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CSCHM,
 TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

51 REFERENCES IN FILE CA (1962 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 51 REFERENCES IN FILE CAPLUS (1962 TO D

ACCESSION NUMBER: 1996:289149 BIOSIS
DOCUMENT NUMBER: PREV199699011505
TITLE: Pyridine derivatives stimulate phosphatidylcholine secretion in primary cultures of rat type II pneumocytes.
AUTHOR(S): Kai, Hirofumi (1); Murahara, Koichiro; Isohama, Yoichiro; Takahama, Kazuo; Oda, Yoshiaki; Hamamura, Ichiro; Yoshitake, Kazuhisa; Miyata, Takeshi
CORPORATE SOURCE: (1) Dep. Pharmacol. Sci., Fac. Pharm. Sci., Kumamoto Univ., 5-1 Oe-honmachi, Kumamoto 862 Japan
SOURCE: Journal of Pharmacy and Pharmacology, (1996) Vol. 48, No. 1, pp. 53-56.
ISSN: 0022-3573.

DOCUMENT TYPE: Article

LANGUAGE: English

ABSTRACT:

We have examined the effects of pyridine derivatives on phosphatidylcholine secretion in primary cultures of rat type II pneumocytes. Of 12 pyridine derivatives, 4-aminopyridine, 4-dimethylaminopyridine and 4-pyrrolidinopyridine had a stimulatory effect on phosphatidylcholine secretion, whereas other derivatives had little effect. The stimulatory effect of 4-aminopyridine was concentration- and time-dependent, and was inhibited by the acetoxymethyl ester of 1,2-bis(2-aminophenoxy)

ethane -N,N,N",N"-

tetraacetic acid (3 μ M), an intracellular Ca-2+ chelator.

In addition, the stimulatory effect of 4-aminopyridine was suppressed by W-7 (N-(6-aminohexyl)-5-chloro-1-naphthalene-sulphonamide) (10 μ M), a calmodulin inhibitor, and sphingosine (10 μ M) and staurosporine (0.1 μ M), protein kinase C inhibitors. These results indicate that several pyridine derivatives stimulate phosphatidylcholine secretion in type II pneumocytes.

CONCEPT CODE: Cytology and Cytochemistry - Animal 02506
Biochemical Studies - Nucleic Acids, Purines and Pyrimidines 10062
Biochemical Studies - Proteins, Peptides and Amino Acids 10064
Biochemical Studies - Lipids 10066
Biochemical Studies - Minerals 10069
Biophysics - Membrane Phenomena *10508
Enzymes - Physiological Studies *10808
Metabolism - Lipids *13006
Blood, Blood-Forming Organs and Body Fluids - Other Body Fluids *15010
Respiratory System - Physiology and Biochemistry *16004
Pharmacology - Drug Metabolism; Metabolic Stimulators *22003
Pharmacology - Respiratory System *22030
Tissue Culture, Apparatus, Methods and Media *32500

BIOSYSTEMATIC CODE: Muridae *86375

INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics);
Membranes (Cell Biology); Metabolism; Pharmacology;
Physiology; Respiratory System (Respiration)

INDEX TERMS: Chemicals & Biochemicals
PYRIDINE; 4-AMINOPYRIDINE; 4-DIMETHYLAMINOPYRIDINE;
4-PYRROLIDINOPYRIDINE; CALCIUM; PROTEIN KINASE C; KINASE
INDEX TERMS: Miscellaneous Descriptors
CALMODULIN-DEPENDENT KINASE; INCREASED PULMONARY
SURFACTANT; INTRACELLULAR CALCIUM; PROTEIN KINASE
C; SIGNAL TRANSDUCTION; 4-AMINOPYRIDINE;
4-DIMETHYLAMINOPYRIDINE; 4-PYRROLIDINOPYRIDINE

ORGANISM: Super Taxa

Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia

ORGANISM: Organism Name
Muridae (Muridae)
ORGANISM: Organism Superterms
animals; chordates; mammals; nonhuman vertebrates; nonhuman
mammals; rodents; vertebrates
REGISTRY NUMBER: 110-86-1D (PYRIDINE)
504-24-5 (4-AMINOPYRIDINE)
1122-58-3 (4-DIMETHYLAMINOPYRIDINE)
2456-81-7 (4-PYRROLIDINOPYRIDINE)
7440-70-2 (CALCIUM)
141436-78-4 (PROTEIN KINASE C)
9031-44-1 (KINASE)

=>

L12 ANSWER 18 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1993:506376 BIOSIS

DOCUMENT NUMBER: PREV199396130383

TITLE: Calcium-dependent chloride secretion across cultures of human tracheal surface epithelium and glands.

AUTHOR(S): Yamaya, M. (1); Ohrui, T.; Finkbeiner, W. E.; Widdicombe, J. H.

CORPORATE SOURCE: (1) Cystic Fibrosis Res. Cent., Cardiovascular Res. Inst., Dep. Physiol. and Pathol., Univ. Calif., San Francisco, CA 94143 USA

SOURCE: American Journal of Physiology, (1993) Vol. 265, No. 2 PART 1, pp. L170-L177.
ISSN: 0002-9513.

DOCUMENT TYPE: Article

LANGUAGE: English

ABSTRACT:

Surface epithelium and gland cells from human trachea were cultured on porous-bottom inserts and loaded with fura 2 to permit measurement of the intracellular calcium concentration ((Ca-2+)-i). Short-circuit current (I-sc), an index of transepithelial active ion transport, was measured on cells from the same cultures. Surface epithelial (Ca-2+)-i of 82 +/- 15 nM was increased transiently by isoproterenol, histamine, and bradykinin with maximal increases of 88 +/- 17, 480 +/- 149, and 978 +/- 214 nM (n = 15), respectively. Baseline (Ca-2+)-i in cultured gland cells of 68 +/- 11 nM was increased transiently by isoproterenol, histamine, methacholine, and bradykinin with maximal increases of 105 +/- 19, 233 +/- 47, 327 +/- 121, and 634 +/- 151 nM (n = 17-21), respectively. In both cell types, mediators that increased (Ca-2+)-i also increased I-sc with a time course identical to the increase in (Ca-2+)-i. Pretreatment with the calcium chelator, 1,2-bis-(
2 -aminophenoxy)ethane N,N,
N ',N'-tetraacetic acid, acetoxymethyl ester (BAPTA-AM), had no effect on basal I-sc or transepithelial resistance but markedly inhibited both the I-sc and (Ca-2+)-i responses to agonists. Forskolin (10-5 M), 3-isobutyl-1-methylxanthine (10-3 M), dibutyryl adenosine 3',5'-cyclic monophosphate (10-3 M), and 8-(4-chlorophenylthio)-cAMP (10-3 M) had no or only trivial effects on I-sc and Ca-2+)-i. We suggest that mediators increase I-sc across human airway epithelium by activating Ca-dependent basolateral K channels, resulting in hyperpolarization and an increased driving force for Cl exit through apical membrane Cl channels.

CONCEPT CODE: Cytology and Cytochemistry - Human *02508
Genetics and Cytogenetics - Human *03508
Biochemical Studies - Minerals 10069
Metabolism - Minerals *13010
Metabolism - Metabolic Disorders *13020
Cardiovascular System - Physiology and Biochemistry *14504
Respiratory System - Physiology and Biochemistry *16004
Developmental Biology - Embryology - Pathological *25503
In Vitro Studies, Cellular and Subcellular *32600

BIOSYSTEMATIC CODE: Hominidae *86215

INDEX TERMS: Major Concepts
Cardiovascular System (Transport and Circulation); Cell Biology; Development; Genetics; Metabolism; Respiratory System (Respiration)

INDEX TERMS: Chemicals & Biochemicals
CALCIUM; CHLORIDE

INDEX TERMS: Miscellaneous Descriptors
ADULT RESPIRATORY DISTRESS SYNDROME; FIBRINOGENOLYSIS;
HYALINE MEMBRANE; PHOSPHOLIPID; PULMONARY
SURFACTANT

ORGANISM: Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISM: Organism Name
Hominidae (Hominidae)
ORGANISM: Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates
REGISTRY NUMBER: 7440-70-2 (CALCIUM)
16887-00-6 (CHLORIDE)

=>

ACCESSION NUMBER: 92187947 EMBASE

DOCUMENT NUMBER: 1992187947

TITLE: Signal transduction mechanisms of Clq-mediated superoxide production: Evidence for the involvement of temporally distinct staurosporine-insensitive and -sensitive pathways.

AUTHOR: Goodman E.B.; Tenner A.J.

CORPORATE SOURCE: Molecular Biology/Biochemistry Dept., 3205 Biosciences II, University of California, Irvine, CA 92717, United States

SOURCE: Journal of Immunology, (1992) 148/12 (3920-3928).

ISSN: 0022-1767 CODEN: JOIMA3

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 026 Immunology, Serology and Transplantation

029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Clq, a plasma glycoprotein and the recognition component of the classical complement pathway, interacts with specific cells of the immune system resulting in the enhancement of cell function. For example, interaction of Clq with its cell-surface receptor on neutrophils induces the activation of the respiratory burst, a finding previously documented using a chemiluminescent assay to detect oxygen radical formation. In an alternative approach we have now used a modified cytochrome c reduction assay to characterize Clq-mediated production of superoxide anion (O₂⁻) in more detail. Clq coated to microtiter wells induced O₂⁻ release, which occurred after a lag period of 10 to 20 min, and was then sustained over approximately 1 h. O₂⁻ production could be triggered by the purified pepsin-resistant, collagen-like fragment of Clq, but not by mannose-binding protein and **pulmonary surfactant** protein A, proteins that also contain collagen-like domains. Concentrations of Clq which promoted a vigorous O₂⁻ generation did not induce release of neutrophil primary granules and caused little or no secondary granule release. Investigation of the biochemical events mediating Clq stimulated O₂⁻ production by neutrophils revealed that the response invoked two biochemical pathways with distinct sensitivities to previously described inhibitors. A role for Ca²⁺ in initiation of the response was suggested by the inhibitory effect of EGTA, the calmodulin antagonist W7, and the intracellular Ca²⁺ chelator **BAPTA**. The protein kinase inhibitor staurosporine did not inhibit the induction of the response, but did block that component of the response occurring after approximately 30 min. Neither phase of Clq-mediated O₂⁻ production was inhibited by pertussis toxin, a strong inhibitor of the G-protein-coupled FMLP-mediated response. In summary, Clq-triggered O₂⁻ production is relatively unique both in terms of the kinetics of the response and the biochemical pathways evoked. These data support the hypothesis that more than one biochemical pathway induced by ligand-receptor interaction can activate the neutrophil NADPH oxidase.

CONTROLLED TERM: Medical Descriptors:

*cell function

*signal transduction

article

controlled study

degranulation

enzyme activation

human

human cell

neutrophil

normal human

priority journal

reduction

respiratory burst

Drug Descriptors:

*complement component clq: EC, endogenous compound
 *cytochrome c: EC, endogenous compound
 *oxygen radical: EC, endogenous compound
 *staurosporine
 *superoxide: EC, endogenous compound
 binding protein
 egtazic acid
 ethylene glycol 1,2 bis(2 aminophenyl) ether n,n,n',n'
 tetraacetic acid
 formylmethionylleucylphenylalanine
 guanine nucleotide binding protein: EC, endogenous compound
 lung surfactant
 mannose
 n (6 aminohexyl) 5 chloro 1 naphthalenesulfonamide
 pertussis toxin
 protein a
 reduced nicotinamide adenine dinucleotide phosphate
 oxidase: EC, endogenous compound
 (complement component clq) 80295-33-6; (cytochrome c)
 9007-43-6, 9064-84-0; (staurosporine) 62996-74-1;
 (superoxide) 11062-77-4; (egtazic acid) 67-42-5; (ethylene
 glycol 1,2 bis(2 aminophenyl) ether n,n,n',n' tetraacetic
 acid) 73630-08-7; (**lung surfactant**)
 99732-49-7; (mannose) 31103-86-3, 3458-28-4; (n (6
 aminohexyl) 5 chloro 1 naphthalenesulfonamide) 65595-90-6;
 (pertussis toxin) 70323-44-3; (reduced nicotinamide adenine
 dinucleotide phosphate oxidase) 9032-22-8

CAS REGISTRY NO.:

=>

OTHER NAMES:

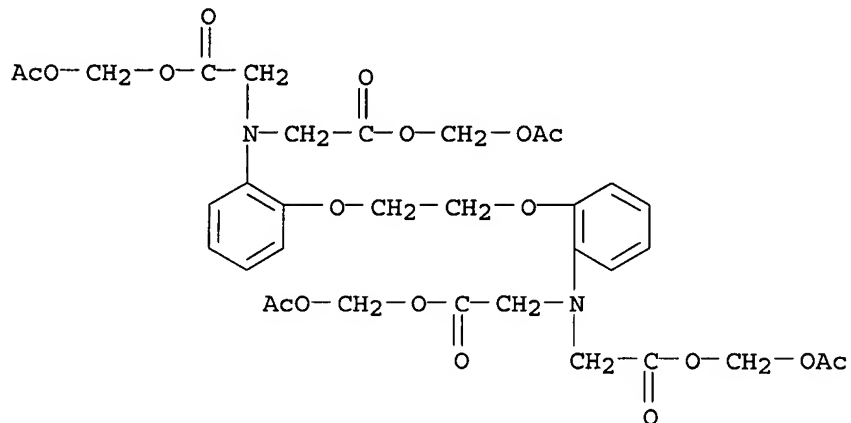
CN BAPTA-AM

FS 3D CONCORD

MF C34 H40 N2 O18

SR CA

LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM,
TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

46 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
46 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L4 ANSWER 30 OF 32 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 84154735 MEDLINE
DOCUMENT NUMBER: 84154735 PubMed ID: 6422991
TITLE: Role of calcium ions the structure and function of
pulmonary surfactant.
AUTHOR: Benson B J; Williams M C; Sueishi K; Goerke J; Sargeant T
CONTRACT NUMBER: HL-24075 (NHLBI)
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1984 Mar 27) 793 (1) 18-27.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198405
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19840507

ABSTRACT:

Pulmonary surfactant isolated by centrifugation in buffers containing ions contains at least three different morphologic structures. The presence of one of these, tubular myelin, is dependent on **calcium** ions, since **chelation** of the **calcium** ions causes disruption of this structure. Addition of EDTA also decreases the ability of the *****surfactant***** to absorb rapidly to air-water interfaces and lower surface tension. Titration with calcium ions (2.5 or 5 mM) restores rapid surface adsorption and restores the tubular myelin structural forms. Magnesium ions cannot substitute for calcium ions in these processes. The reversibility of structure and function induced by calcium ions and EDTA is also accompanied by reversible isopycnic density shifts probably related to aggregation and disaggregation of the lipid-protein complex with calcium ions and EDTA, respectively.

CONTROLLED TERM: Check Tags: Animal; Female; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
*Calcium
Dogs
Edetic Acid
Microscopy, Electron
Myelin Proteins: AN, analysis
Phospholipids: AN, analysis
*Pulmonary Surfactants
Pulmonary Surfactants: AN, analysis
Pulmonary Surfactants: IP, isolation & purification
CAS REGISTRY NO.: 60-00-4 (Edetic Acid); 7440-70-2 (Calcium)
CHEMICAL NAME: 0 (Myelin Proteins); 0 (Phospholipids); 0 (Pulmonary Surfactants)

=>